

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 31

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

---

Ex parte KIYOSHI TOYAMA and MASAYUKI TOGAWA

---

Appeal No. 1996-3814  
Application No. 08/348,835<sup>1</sup>

---

ON BRIEF

---

Before JOHN D. SMITH, ELLIS, and KRATZ, Administrative Patent Judges.

KRATZ, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's refusal to allow claim 2, which is the only claim pending in this application.

---

<sup>1</sup> Application for patent filed November 29, 1994. According to appellants, this application is a continuation of Application No. 08/073,289, filed June 7, 1993, now abandoned; which is a continuation of Application No. 07/784,538, filed October 29, 1991, now abandoned.

BACKGROUND

The appellants' invention relates to a method of acquiring position information by detecting predetermined patterns of magnetic substance in a substrate formed with grooves filled with the magnetic substance. An understanding of the invention can be derived from a reading of the sole appealed claim 2, which is reproduced below.

2. A method comprising providing a substrate formed with grooves arranged in accordance with predetermined patterns and a magnetized magnetic substance filling said grooves, using said substrate with said magnetized substance as a magnetic scale including detecting said predetermined patterns to acquire information on a position.

The prior art references of record relied upon by the examiner in rejecting the appealed claims are:

Henrich et al. (Henrich)	3,768,094	Oct.
23, 1973		

Marechal et al. (Marechal)	4,899,037	Feb. 06,
1990		

Claim 2 stands rejected under 35 U.S.C. § 112, second paragraph, as failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention. Claim 2 stands rejected under 35 U.S.C. § 103 as being unpatentable over Henrich in view of Marechal.

OPINION

We refer to the appellants' briefs and to the answer and supplement thereto for a complete exposition of the opposing viewpoints expressed by the appellants and the examiner concerning the above noted rejections. For the reasons which follow, we cannot sustain either of these rejections.

*Rejection under 35 U.S.C. § 112, second paragraph*

The relevant inquiry under 35 U.S.C. § 112, second paragraph, is whether the claim language, as it would have been interpreted by one of ordinary skill in the art in light of appellant's specification and the prior art, sets out and circumscribes a particular area with a reasonable degree of precision and particularity. See In re Moore, 439 F.2d 1232, 1235, 169 USPQ 236, 238 (CCPA 1971).

In rejecting claim 2 under 35 U.S.C. § 112, second paragraph, the examiner (supplemental examiner's answer, page 3) urges that:

It is not clear what is meant by "detecting said predetermined patterns to acquire information on a position".... Applicant is apparently using the

predetermined patterns on the magnetic scale to detect predetermined patterns on the magnetic scale. This does not make sense.

However, as indicated above, the claims are not read in a vacuum. From our reading of appellants' specification and the relevant prior art, it is clear that claim 2 is drawn to a method including the steps of (1) providing a substrate that is formed with grooves arranged in predetermined patterns and which grooves are filled with a magnetized magnetic substance (Figures 8-14 and pages 11-18 of appellants' specification) and (2) detecting the predetermined patterns of the filled grooves of the substrate to obtain position information therefrom as part of the claimed method of employing the substrate as a magnetic scale (appellants' specification, page 2, lines 23-27). Moreover, as evidenced by the Henrich patent (Figures 1-5), of record, a skilled artisan would understand the meaning of the method step of detecting a pattern on a magnetic scale to obtain position information.

We do not agree with the view expressed in the dissenting opinion regarding the majority's claim interpretation requiring the importation of a magnetic head limitation into the claim. As outlined above, the second claimed step

requires detecting predetermined patterns so as to obtain position information. While a magnetic head could be used for the detection step as disclosed in the specification (page 2, lines 23-27), our reading of the claims does not import the disclosed specific magnetic

head reading element into the claims. Rather, we rely on the "detecting" step already recited in the claim.

In light of the claim language, appellants' specification and the relevant prior art as discussed above, we agree with appellants' conclusion that the claims are reasonably definite so as to be in compliance with 35 U.S.C. § 112, second paragraph. Accordingly, we cannot sustain this rejection.

*Rejection under 35 U.S.C. § 103*

Henrich is relied upon by the examiner for this reference's teaching of a method of sensing position using as a magnetic scale a substrate having predetermined patterns of magnetized magnetic materials deposited thereon. The examiner acknowledges that Henrich does not provide a substrate formed with

predetermined grooves filled with magnetized magnetic substance as called for by the appealed method claim (answer, page 3). According to the examiner (answer, page 3):

Marechal et al. teach filling predetermined grooves with a magnetic substance for an information recording element (col. 5, l. 62 to col. 6, l. 63). It would have been obvious to one of ordinary skill in this art at the time of the invention to fill predetermined grooves with a magnetic substance to form the magnetic patterns of Henrich. One of ordinary skill in this art would have been motivated to make this substitution to the magnetic scale of Henrich because of the teaching of Marechal et al. that filling the magnetic substance in predetermined grooves protects the magnetic substance from ambient conditions.

The § 103 rejection is premised upon the examiner's position that the claimed magnetized particle filled grooves of the substrate are not patentably distinguishable from Marechal's tracks (supplemental answer, page 3 and answer, pages 3, 5, and 6). Appellants contend, in effect, that the teachings of Marechal relied upon by the examiner would, at most, suggest the use of the side-by-side magnetized particle/non-magnetized particle tracks of Marechal in layer(s) deposited on the substrate of Henrich, not the provision of a substrate with predetermined grooves formed therein and the filling of said grooves with magnetized

magnetic particles as claimed (brief, pages 16 and 17 and reply brief, pages 3-6). Thus, a determinative issue presented by the rejection is whether or not it is appropriate to interpret the claimed step of "providing a substrate formed with grooves arranged in accordance with predetermined patterns and a magnetized magnetic substance filling said grooves" as encompassing or having been rendered obvious by Marechal's disclosure of side-by-side tracks as relied upon by the examiner. In proceedings before the Patent and Trademark Office, claims in an application are to be given their broadest reasonable interpretation consistent with the specification and as they would be viewed by one skilled in the art. See *In re Sneed*, 710 F.2d 1544, 1546, 218 USPQ 385, 388 (Fed. Cir. 1983). It follows that the claimed provision of a substrate having predetermined grooves filled with magnetized magnetic particles may be broadly interpreted as encompassing the alternating tracks of Marechal in accordance with the examiner's position only if such an interpretation is reasonable and consistent with the subject specification.

We observe, however, that appellants' specification including the various embodiments and drawing figures

consistently discloses that the predetermined patterns of grooves (19, figures 9(a) and (b), and figures 8 and 10-14) are carved into the substrate and arranged in the substrate such that separate tracks of non-magnetized particles are not adjacent to the magnetized particle filled grooves. Rather, the magnetized particle filled grooves are formed such that the substrate itself defines the walls of the grooves. This disclosure leads us to conclude that it would not be reasonable and consistent with the subject specification to interpret the claimed magnetized particle filled grooves of the substrate as seemingly urged by the examiner, namely, as encompassing or being intuitively obvious from the relied on alternating tracks of Marechal. Under these circumstances, we cannot agree with the examiner's position.

In our view, the examiner's stated rejection falls short of presenting a *prima facie* case of obviousness for the reasons set forth above. In this regard, it is well-settled that all of the claim limitations must be considered when weighing the differences between the claimed invention and the prior art in determining the obviousness or nonobviousness



thereof. Accordingly, we will not sustain the examiner's stated § 103 rejection.

#### CONCLUSION

To summarize, the decision of the examiner to reject claim 2 under 35 U.S.C. § 112, second paragraph, as failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention, and reject claim 2 under 35 U.S.C. § 103 as being unpatentable over Henrich in view of Marechal is reversed.

#### *OTHER ISSUES*

In the event of further or continuing prosecution, the examiner should determine the patentability of the claimed subject matter in view of the teachings of U.K. Patent No. 1,180,356 and French Patent No. 1,588,133. In this regard, we observe that Marechal references these patents at column 1, lines 45-53 indicating that they pertain to depositing magnetic tracks in grooves and correspond to each other.

No time period for taking any subsequent action in  
connection with this appeal may be extended under 37 CFR  
§ 1.136(a).

REVERSED

JOHN D. SMITH	)	
Administrative Patent Judge	)	
	)	
	)	
	)	
	)	BOARD OF PATENT
PETER F. KRATZ	)	APPEALS
Administrative Patent Judge	)	AND
	)	INTERFERENCES
	)	

tdl

Ellis, Administrative Patent Judge, concurring-in-part;  
dissenting-in-part.

I concur with majority that the rejection under 35 U.S.C. § 103, cannot be sustained. However, because I disagree with their resolution of the issues raised by the examiner under 35 U.S.C. § 112, second paragraph, it follows that my reasons for reversing the obviousness rejection differ. In my view the § 112 rejection should be affirmed as the claim is vague and indefinite for failing to positively set forth the relationship between the claimed elements. See the Supplemental Examiner's Answer, Paper No. 28, p. 3, para. 1.

It is well established that "[d]uring patent examination the pending claims must be interpreted as broadly as their terms reasonably allow." In re Zletz, 893 F.2d 319, 321, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989); In re Sneed, 710 F.2d 1544, 1548, 218 USPQ 385, 388 (Fed. Cir. 1983)("It is axiomatic that, in proceedings before the PTO, claims in an application are to be given their broadest reasonable interpretation consistent with the specification.") Nevertheless, it is imperative that claim limitations or embodiments appearing in the specification not be read into the claims. Loctite Corp. v. Ultraseal, Ltd., 781 F.2d 861,

866-67, 228 USPQ 90, 93 (Fed. Cir. 1985); See also In re Zletz, 893 F.2d at 321, 13 USPQ2d at 1322; In re Prater, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-51 (CCPA 1969) (before an application is granted, there is no reason to read into the claim the limitations of the specification).

As set forth by our appellate reviewing court in E.I. duPont de Nemours & Co. v. Phillips Petroleum Co., 849 F.2d 1430, 1433, 7 USPQ2d 1129, 1131 (Fed. Cir.), cert. denied, 488 U.S. 986 (1988):

It is entirely proper to use the specification to interpret what the patentee meant by a word or phrase in the claim. See, e.g., Loctite Corp. v. Ultraseal Ltd., 781 F.2d 861, 867, 228 USPQ 90, 93 (Fed Cir. 1985). But this is not to be confused with adding an extraneous limitation appearing in the specification, which is improper. By "extraneous," we mean a limitation read into a claim from the specification wholly apart from any need to interpret what the patentee meant by particular words or phrases in the claim. "Where a specification does not require a limitation, that limitation should not be read from the specification into the claims." Speciality Composites v. Cabot Corp., 845 F.2d 981, 987 (Fed. Cir. 1988) (emphasis in original), citing Lemelson v. United States, 752 F.2d 1538, 1551-52, 224 USPQ 526, 534 (Fed. Cir. 1985)[emphases added].

The reason for not reading limitations from the specification into the claims was articulated in SRI Int'l v.

Matsushita Elec. Corp. of Am., 775 F.2d 1107, 1121, 227 USPQ  
577, 585 (Fed. Cir. 1985)

If everything in the specification were required to be read into the claims, or if structural claims were to be limited to devices operated precisely as a specification-described embodiment is operated, there would be no need for claims. Nor could an applicant, regardless of the prior art, claim more broadly than that embodiment. Nor would a basis remain for the statutory necessity that an applicant conclude his specification with "claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention." 35 U.S.C. § 112. It is the claims that measure the invention. Aro Mfg. Co., Inc. v. Convertible Top Replacement Co., Inc., 365 U.S. 336, 339, 81 S.Ct. 599, 600-01, 5 L.Ed.2d 592, 128 USPQ 354, 356-57 (1961); Bandag, Inc. v. Al Bolser's Tire Stores, Inc., 750 F.2d 903, 922, 223 USPQ 982, 996 (Fed. Cir. 1984); Jones v. Hardy, 727 F.2d 1524, 1528, 220 USPQ 1021, 1022 (Fed. Cir. 1984)[footnote deleted].

Here, the majority states that they understand the method of detection described in claim 2 based on the teachings of the specification. To that end, the majority points generally to numerous figures and pages (Figures 8-14 and pages 11-18) in the specification, as well as to page 2, lines 23-27, specifically. With respect to the former, I agree with the majority that the specification teaches "a substrate that is formed with grooves arranged in predetermined patterns and which grooves are filled with a magnetized magnetic

substance," Decision, p. 4. However, the relevant issue here is whether the claim, which is directed to "a method" which comprises using said substrate, sets forth said method with "a reasonable degree of precision and particularity." In re Moore, 439 F.2d 1232, 1235, 169 USPQ 236, 238 (CCPA 1971).

In turning to the section of the specification relied upon by the majority (i.e., page 2, lines 23-27), I find that it states that "the magnetic sensor, predetermined magnetic patterns are manufactured with high accuracy of position by the magnetic head for recording, and the magnetic patterns are detected by the magnetic head for detection to acquire information on a position." I do not find that such teachings shed much light on steps necessary to perform the claimed method which comprises using the substrate described in claim 2, which is formed with grooves in predetermined patterns and filled with a magnetized magnet substance, to detect said predetermined patterns. The quoted passage indicates that the substrate is manufactured with high accuracy of position. In addition, the quoted passage indicates that the predetermined patterns in the substrate are detected by a separate instrument; i.e., a magnetic head, for detection to acquire information on a position. However, there is no requirement

for a magnetic head recited in claim 2. Thus, in my view, in order to arrive at their interpretation of the steps in the claimed method, as stated on page 4 of their decision, the majority is improperly reading limitations (in this case the presence of a magnetic head) from the specification into the claims.

According to the majority, one skilled in the art would understand the method described in claim 2 as evidenced by the Figures 1-5 in the Henrich patent. In turning to the figures relied on by the majority, I find that they are drawings of various apparatuses, none which correspond to the description of the substrate set forth in claim 2. Thus, it is not clear to me, nor has the majority explained, how the referenced figures render the method in claim 2 definite within in the meaning of § 112.

Since I find that claim 2 fails to satisfy the definiteness requirements of the second paragraph of § 112, it reasonably follows that this merits panel should not reach the examiner's rejection under § 103. To that end, the court has held that it is erroneous to analyze claims based on "speculation as to the meaning of terms employed and assumptions" as to their scope. In re Steele, 305 F.2d 859,

862, 134 USPQ 292, 295 (CCPA 1962) ("We do not think a rejection under 35 U.S.C. 103 should be based on such speculations and assumptions"). Accordingly, since the metes and bounds of the claimed invention have not yet been clarified, the obviousness rejection is improper and should be reversed.

JOAN ELLIS

Administrative Patent Judge

) BOARD OF PATENT  
) APPEALS  
) AND  
) INTERFERENCES

Lane, Aitken & McCann  
2600 Virginia Avenue, N.W.,  
Suite 901  
Washington, DC 20037



APPEAL NO. 1996-3814  
APPLICATION NO. 08/784,538

APJ KRATZ

APJ JOHN D. SMITH

APJ ELLIS

DECISION: **REVERSED**

Prepared By: TINA

**DRAFT TYPED:** 15 Dec 00

**FINAL TYPED:**